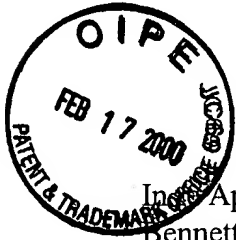


GR. 2744

PHO 99-003



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

6
08
3/6

Inventor Application of:
Bennett, Ian M.

) Art Unit: 2744

)

) Examiner: Unknown

Serial No.: 09/439,174

)

)

Filed: 11/12/99

)

)

For: *Internet Server with Speech Support*
for Enhanced Interactivity

)

RECEIVED

FEB 22 2000

GROUP 2700

INFORMATION DISCLOSURE STATEMENT

Commissioner of Patents and Trademarks
Washington, D.C. 20231

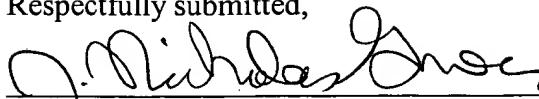
Sir:

1. Pursuant to 37 C.F.R. 1.97 and 1.98, and in compliance with 37 C.F.R. 1.56, the Office's attention is directed to the patents, publications and other information listed on the attached PTO-1449. Regarding the document(s), publication(s) or other information listed on the attached PTO-1449, Applicant believes the same may qualify as "prior" art to this application and should be treated accordingly, although Applicant(s) reserve(s) the right to contest the prior art status of any document, publication or information cited herein.

To expedite consideration of the case, applicants have included hard copies of all the US patents cited herein. Copies of the other background materials cited here are expected to follow shortly under separate cover.

2. Pursuant to 37 C.F.R. 1.97(b) this Statement is being filed within 3 months of the filing date.

Respectfully submitted,



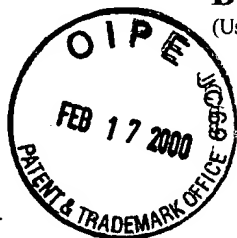
J. Nicholas Gross, Attorney, Reg. No. 34,175

February 14, 2000
1385 Mission St. Suite 240
San Francisco, CA 94103
Tel. (415)551-8298

I hereby certify that the foregoing is being deposited with the U.S. Postal Service, postage prepaid, to the Commissioner of Patents and Trademarks, this 14th day of February 2000.

Form PTO-1449
(REV. 7-92)U.S. DEPARTMENT OF COMMERCE
Patent and Trademark OfficeAttorney's Docket Number:
PHO 99-003Serial No.:
09/439,174**INFORMATION DISCLOSURE STATEMENT****BY APPLICANT**

(Use several sheets if necessary)



Applicant(s): Bennett

Filing Date: 11/12/99

Group Art Unit :2744

RECEIVED

U.S. PATENT DOCUMENTS

FEB 22 2000

*EXAMINER INITIAL	DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5	9	6	0	3	9	9	9/28/99	Barclay et al.	704	270	12/24/97
	5	9	6	0	3	9	4	9/28/99	Gould et al.	704	240	10/22/97
	5	9	5	6	6	8	3	9/21/99	Jacobs et al.	704	275	4/4/96
	5	9	1	5	2	3	6	6/22/99	Gould et al.	704	251	6/26/97
	5	8	6	7	8	1	7	2/2/99	Catallo et al.	704	255	8/19/96
	5	8	1	9	2	2	0	10/6/98	Sarukkai et al.	704	243	9/30/96
	5	8	0	2	2	5	6	9/1/98	Fawcett et al.	707	104	4/18/96
	5	7	5	8	3	2	2	5/26/98	Rongley	704	275	12/9/94

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	L. Travis, "Handbook of Speech Pathology", Appleton-Century-Crofts, Inc., 1957
	L.E. Baum, T. Petrie, "Statistical inference for probabilistic functions for finite state Markov chains", Ann. Math. Stat., 37: 1554-1563, 1966
	J.L. Flanagan, "Speech Analysis Synthesis and Perception", 2 nd edition, Springer-Verlag Berlin, 1972
	L.E. Baum, "An inequality and associated maximization technique in statistical estimation for probabilistic functions of Markov processes", Inequalities 3: 1-8, 1972

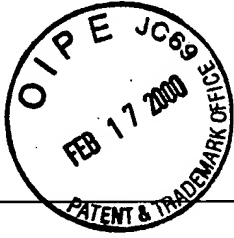
EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449
(REV. 7-92)U.S. DEPARTMENT OF COMMERCE
Patent and Trademark OfficeAttorney's Docket Number:
PHO 99-003Serial No.:
09/439,174**INFORMATION DISCLOSURE STATEMENT****BY APPLICANT**

(Use several sheets if necessary)



Applicant(s): Bennett

Filing Date: 11/12/99

Group Art Unit :2744

FEB 22 2000

U.S. PATENT DOCUMENTS**GROUP 2700**

*EXAMINER INITIAL	DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5	6	8	0	6	2	8	10/21/97	Carus et al.	395	759	7/19/95
	5	3	8	4	8	9	2	1/24/95	Strong	395	2.52	12/31/92
	5	2	3	1	6	7	0	7/27/93	Goldhor et al.	381	43	3/19/92
	5	1	4	6	4	0	5	9/8/92	Church	364	419	2/5/88
	5	0	6	8	7	8	9	11/26/91	Van Vliembergen	364	419	9/15/89
	4	9	9	1	2	1	7	2/5/91	Garrett et al.	381	43	11/30/84
	4	9	9	1	0	9	4	2/5/91	Fagan et al.	364	419	4/26/89
	4	5	8	7	6	7	0	5/6/86	Levinson et al.	381	43	10/15/82

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	G.D. Fournery, "The Viterbi Algorithm", Proc. IEEE, Vol. 73, pp268-278, March 1973.
	J.H. Baker, "The dragon system - An Overview", IEEE Trans. on ASSP Proc., ASSP-23(1): 24-29, Feb. 1975
	I. Bennett and J. Linvill, "A Study of Time Domain Speech Compression by Means of a new Analog Speech Processor", Journal of the Audio Engineering Society, Vol. 23, No. 9, 1975.
	H.R. Rabiner, "Digital Processing of Speech Signals", Prentice Hall, 1978

EXAMINER

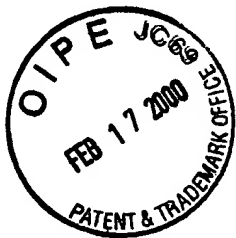
DATE CONSIDERED

*EXAMINER:

Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449
(REV. 7-92)U.S. DEPARTMENT OF COMMERCE
Patent and Trademark OfficeAttorney's Docket Number:
PHO 99-003Serial No.:
09/439,174**INFORMATION DISCLOSURE STATEMENT****BY APPLICANT**

(Use several sheets if necessary)



Applicant(s): Bennett

Filing Date: 11/12/99

Group Art Unit :2744

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

RECEIVED

FEB 22 2000

GROUP 2700

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	J.D. Ferguson, "Hidden Markov Analysis: An Introduction", in Hidden Markov Models for Speech, Institute of Defense Analyses, Princeton, NJ, 1980
	F. Jeninek et al, "Continuous Speech Recognition: Statistical methods" in Handbook of Statistics, II, P.R. Kristnaiad, Ed. Amsterdam, The Netherlands, North-Holland, 1982
	L.R. Bahl, F. Jeninek, R.L. Mercer, "A maximum likelihood approach to continuous speech recognition", IEEE Trans. Pattern Anal. Mach. Intell., PAMI-5: 179-190, 1983
	R.A. Hudson, Word Grammar, Blackman Inc., Cambridge, MA, 1984.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

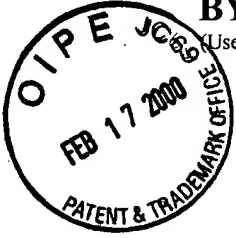
Attorney's Docket Number:
PHO 99-003

Serial No.:
09/439,174

INFORMATION DISCLOSURE STATEMENT

BY APPLICANT

(Use several sheets if necessary)



Applicant(s): Bennett

Filing Date: 11/12/99

Group Art Unit :2744

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	R. Quirk, S. Greenbaum, G. Leech and J. Svartvik, A Comprehensive Grammar of English Language, Longman, London and New York, 1985.
	J. Makhoul, S. Roucos, H. Gish, "Vector Quantization in Speech Coding, Proc. IEEE, Vol. 73, No. 11, Nov. 1985.
	L. Rabiner, "A Tutorial on Hidden Markov Models and Selected Applications ins Speech Recognition", Proc. IEEE, Vol. 77, No. 2, Feb. 1989.
	A. Gersho and R.M. Gray, "Vector Quantization and Compression", Kluwer Academic Publishers, 1991.

EXAMINER

DATE CONSIDERED

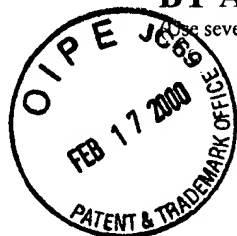
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

Attorney's Docket Number:
PHO 99-003

Serial No.:
09/439,174

INFORMATION DISCLOSURE STATEMENT BY APPLICANT



(use several sheets if necessary)

Applicant(s): Bennett

Filing Date: 11/12/99

Group Art Unit :2744

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	H.R. Rabiner and B.H. Juang, "Fundamentals of Speech Recognition", Prentice Hall, 1993
	Nelson Morgan, Hervé Bourlard, Steve Renals, Michael Cohen and Horacio Franco Hybrid Neural Network/Hidden Markov Model Systems for Continuous Speech Recognition. <i>Journal of Pattern Recognition and Artificial Intelligence</i> , Vol. 7, No. 4 pp. 899-916. (1993)
	I. Guyon and P. Wang editors, <i>Advances in Pattern Recognition Systems using Neural Networks</i> , Vol. 7 of a Series in Machine Perception and Artificial Intelligence. World Scientific, Feb. 1994.
	P. Lieberman, "Intonation, Perception and Language", Research Monograph No. 38, MIT Press, Cambridge, Mass.

EXAMINER

DATE CONSIDERED

***EXAMINER:** Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.